

Date: Sat, 22 May 93 02:37:11 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #622
To: Info-Hams

Info-Hams Digest Sat, 22 May 93 Volume 93 : Issue 622

Today's Topics:

2 Meters and Airlines
An interesting New-Ham story
any yaesu 5100 mods around?
Audio filter question???
A Yagi at 11,000 feet
Cheers (2 msgs)
Don't get ripped off by a G5RV
G5RV Peformance (was Don't get ripped off by a G5RV)
Intermod/spurious sigs a common HT problem?
Manual for Drake receivers
Maxcom fraud (was Re: Don't get ripped off by a G5RV)
Question: Can a novice take the extra test?
Ramsey Kit mods

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: Fri, 21 May 1993 18:59:58 GMT
From: castor!082589@lanl.gov
Subject: 2 Meters and Airlines
To: info-hams@ucsd.edu

I've hand carried scanners and 2m rigs aboard aircraft and into airports. No problems with security.

Date: 21 May 1993 20:01:39 GMT
From: agate!howland.reston.ans.net!noc.near.net!transfer.stratus.com!
sw.stratus.com!fms@ames.arpa
Subject: An interesting New-Ham story
To: info-hams@ucsd.edu

In article <1993May21.140406.22356@news.acns.nwu.edu>, rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:
> Here is an interesting new-ham story.
>
> [FASCINATING story about over-the-air rescue of person with dislocated spine
> deleted...]
>
> Jim was so impressed with ham radio that he decided to become a ham
> himself. He realized that code would be the tough part and so he
> first studied code - pretty much by himself using computer programs.
> He looked over the theory a couple of hours before taking the test.
>
> He is on the air now.
>
> Is this not a great hobby?
>

OUTSTANDING!! That, in a nutshell, is what I feel Amateur Radio is all about -- people helping other people, be they next door or next continent.

Please pass along my congratulations to Jim, along with a hearty welcome to the hobby, and a big "Attaboy" to Rob for having the idea of bringing Jim into the conversation in the first place!

73 de Faith N1JIT

--

Faith M. Senie InterNet: fms@vos.stratus.com
Stratus Computer, Inc. InterNet: fms@hoop.sw.stratus.com
55 Fairbanks Blvd. Pkt Radio: n1jit@wa1phy.ma.usa.na
Marlboro, MA 01752 Phone: (508)460-2632

"I'm afraid I don't know very much about Romulan Disruptor settings" --Spock

Date: 21 May 93 15:45:29 GMT
From: amdcad!amdc12!brian@sun.com
Subject: any yaesu 5100 mods around?
To: info-hams@ucsd.edu

>
> I checked out the usual suspects (mod servers) and could not find any mods
> for the Yaesu FT-5100. Does anybody have em?
>
> Thanks.

I maintain such a list (for the 5100/5200 pair) and it was posted less than a month ago. I haven't received any updates or changes since then, but I'd like to hear about anything new that people have discovered (so I can add it to the list). The current rev is Rev C. Even if there are no more changes to it, I'll re-post it in early June.

Please wait for the post -- I can't handle the e-mail volume that this kind of post usually generates! (And for those interested, I'll cross post with r.r.info...)

Brian McMinn N5PSS brian.mcminn@amd.com

Date: 21 May 1993 17:12:52 GMT
From: saimiri.primate.wisc.edu!sdd.hp.com!swrinde!emory!news-feed-1.peachnet.edu!
concert!balsam!etowah.cs.unca.edu!sampson@ames.arpa
Subject: Audio filter question???
To: info-hams@ucsd.edu

I recently have been debating purchasing an audio filter to accompany my kenwood ts520s. My question is for the ones in netland with experience with both the older style resistor/capacitor type filters (ie. The Autek Research type) and the newer DSP type filters. I have noticed that for only around 50 bucks more I could try out one of the new DSP filters with the automatic notch filter for stations tuning up on freq,etc. How is the performance of these new filters? Are they better than the older style and is the additional cost worth it. Thanks in advance. Feel free to reply here or via email via this account.

73

Daryl
KM4GO

--

* Daryl E. Sampson * Amateur Radio
* EMAIL: dsampson@aurora.ncdc.noaa.gov * KM4GO *

Date: Fri, 21 May 1993 16:39:50 GMT
From: elroy.jpl.nasa.gov!swrinde!emory!europa.eng.gtefsd.com!darwin.sura.net!
newsserver.jvnc.net!yale.edu!news.yale.edu!hilbert.chem.yale.edu!oswood@ames.arpa
Subject: A Yagi at 11,000 feet
To: info-hams@ucsd.edu

In article <C7Cs0t.Hyp@srgenprp.sr.hp.com>, alanb@sr.hp.com (Alan Bloom) writes:

|>
|> Take an
|> ice cube out of the refrigerator and see if it measures infinity with an
|> ohmmeter. Once it starts to melt, you'll get conduction through the
|> water film on the surface.
|>
|> AL N1AL
|>

Not to turn this into rec.radio.electrochemistry, but the conductivity of water depends upon the amount of ionic impurities dissolved in it. We use purified water in my lab which has a resistance of ~18 million ohms/cm. Sea water, on the other hand, makes an excellent (if corrosive) ground plane because it conducts electricity very well due to dissolved ions. I'm not sure what the ionic mobility is in ice compared to water, but I imagine, as Al suggests, that it would be lower, making ice a good insulator regardless of the purity of the water from which it was created.

Mark C. Oswood N1NXW/AA oswood@psun.chem.yale.edu
 or moswood@biomed.bitnet

Date: 21 May 93 13:24:51 GMT
From: saimiri.primate.wisc.edu!usenet.coe.montana.edu!ogicse!usenet.ee.pdx.edu!
fastrac.llnl.gov!wsrcc.com!ware!spunky.RedBrick.COM!psinntp!psinntp!laidbak!
tellab5!jwa@ames.arpa
Subject: Cheers
To: info-hams@ucsd.edu

Last night on the last episode of Cheers, Ham radio was mentioned. Cliff Claven (the mail man) was trying to get promoted by buying his boss a Ham radio.

For those of you who's boss is a Ham and you want a promotion, try it, let me know if it works.

Jack Albert Fellow Radio Buff
Tele (708) 512-7854
Tellabs, Inc. FAX (708) 852-7346
4951 Indiana Ave. jwa@tellabs.com
Lisle, IL
60532

Do you have a certain itch that's so private,
you'll only discuss it with your doctor? How
about your Clergy or your Attorney or Congress-
person? Well, what about your wife or Mistress?

Date: 21 May 93 15:16:31 EDT
From: olivea!sgigate!sgiblab!wareware!spunky.RedBrick.COM!psinntp!psinntp!
arrl.org@ames.arpa
Subject: Cheers
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, jwa@tellabs.com (John W. Albert) writes:

>Last night on the last episode of Cheers, Ham radio was mentioned.
>Cliff Claven (the mail man) was trying to get promoted by buying
>his boss a Ham radio.

>For those of you who's boss is a Ham and you want a promotion,
>try it, let me know if it works.

I will pass this suggestion along to all of the ARRL Lab staff.
Their boss is a ham. :-).

73 from ARRL HQ, Ed

Ed Hare, KA1CV ehare@arrl.org
American Radio Relay League
225 Main St.
Newington, CT 06111 "The goal of every engineer is to
(203) 666-1541 - voice retire without getting blamed for a
ARRL Laboratory Supervisor major catastrophe." -- Scott Adams
RFI, xmtr and rcvr testing and Dilbert

Date: 20 May 93 12:02:03 GMT
From: unogate!news.service.uci.edu!usc!sdd.hp.com!saimiri.primate.wisc.edu!
usenet.coe.montana.edu!ogicse!usenet.ee.pdx.edu!fastrac.llnl.gov!wsrcc.com!
wetware!spunky.RedBrick.COM!@mvb.saic.com
Subject: Don't get ripped off by a G5RV
To: info-hams@ucsd.edu

In article <1993May17.214122.22853@nntp2.cxo.dec.com>, little@nuts2u.enet.dec.com
(nuts2u::little) writes:

>
> The SWR as measured at the transmitter will be less than 3:1 *because* of
> the resistive losses in the coax. So although the SWR seems reasonable,
> it's only because you are heating the coax feed line. G5RV has stated that
> the antenna is 3/2 wavelength antenna on 20 meters and a random length wire
> on all other bands. No amount of open wire feeder or coax or combination
> can yield a good match across all bands without a tuner. To get a true
> indication of the antennas operation, measure the SWR at the antenna and at
> the open wire to coax junction. Don't be surprised if you can't get an
> accurate measurement as most SWR meters won't handle the high SWR you are
> likely to find.
>

Kurt N. Sturba would love this guy :-) :-)

John Rice - K9IJ	"Did I say that ?" I must have, but It was
rice@ttd.teradyne.com	MY opinion only, no one else's...Especially
(708)-940-9000 - (work)	Not my Employer's.... Licensed since 1959
(708)-438-5065 - (bbs)	Ex: K8YZR, KH6GHC, WB9CSP, W9MMB, WA1TXV

Date: 21 May 93 12:30:22 GMT
From: saimiri.primate.wisc.edu!usenet.coe.montana.edu!ogicse!usenet.ee.pdx.edu!
fastrac.llnl.gov!wsrcc.com!wetware!spunky.RedBrick.COM!psinntp!psinntp!laidbak!
tellab5!jwa@ames.arpa
Subject: G5RV Peformance (was Don't get ripped off by a G5RV)
To: info-hams@ucsd.edu

I'm not an expert in antennas but I remember reading an article in QST about broad band antennas. The article stated "it's possible to find an impedance that is constant over a wide range of frequencies. If an antenna is fed with a matching device at that impedance, for example 50 ohms to 1000 ohms, it is possible to maintain a flat SWR over that range." The G5RV uses the 300 ohm twin lead as the matching

transformer. I haven't disassembled the PVC housing, however, I was told that there is a balun inside.

My XYL did notice that, when ever there's a thunder storm near by, she can hear an acrhing sound comming from the housing.

Jack Albert Fellow Radio Buff
 Tele (708) 512-7854
Tellabs, Inc. FAX (708) 852-7346
4951 Indiana Ave. jwa@tellabs.com
Lisle, IL
60532

Do you have a certain itch that's so private,
you'll only discuss it with your doctor? How
about your Clergy or your Attorney or Congress-
person? Well, what about your wife or Mistress?

Date: Fri, 21 May 93 15:27:02 GMT
From: concert!news-feed-1.peachnet.edu!umn.edu!csus.edu!netcom.com!netcomsv!bongo!
skyld!jangus@decwrl.dec.com
Subject: Intermod/spurious sigs a common HT problem?
To: info-hams@ucsd.edu

In article <1tegq2\$jpi@techbook.techbook.com> genew@techbook.techbook.com writes:

> If so, how do some of the newer rigs perform?
> Such as Yaesu FT-530, ICOM W21AT, Kenwood TH-78A.

The Kenwood TH-78A is a sack of (insert favorite term).

I had the TH-75 and sold it after almost wrecking the vehicle trying to change frequencies at night on the highway. I bought the TH-77A to replace it because it has backlit buttons. My friends all bought the TH-78A because it's "Newer, must be better". Mine works fine in the truck with a Kenwood dualband whip, and it works fine at the house with a 17 ft. homebrew vertical. The friends with the TH-78A's noticed that they can't hear half the things I can in side by side comparisons, and when we switch to an outside antenna, *ALL* they can hear is intermod products.

If you insist on a a fairly new and a dualband HT, get the TH-77A You won't be dissapointed with it and it does all of the spiffy new option stuff like DTFM paging, phonenumbers autodialing, ringing like a cellular phone to impress your friends, monitors the Cellular bands

etc.

73 es Gm from Jeff

J. Angus: jangus@skyld.tele.com -- "Als ik Kan", Gustav Stickley
US Mail: PO Box 4425 Carson, CA 90749-4425 1 (310) 324-6080

Date: Fri, 21 May 93 15:15:41 GMT
From: concert!news-feed-1.peachnet.edu!umn.edu!csus.edu!netcom.com!netcomsv!bongo!
skyld!jangus@decwrl.dec.com
Subject: Manual for Drake receivers
To: info-hams@ucsd.edu

In article <19930519.065458.23@almaden.ibm.com> hugo@vnet.IBM.COM writes:

> I am needing copies or photocopies for R3 and R4 Drake receivers.
> I would appreciate information on how and from where to get them.

R.L. Drake Company
911 Springboro Pike
Miamisburg, OH 45342

Service and Parts, 1 (513) 866-3211

Great service. I ordered and got a manual for a 2B Plus the tech service personal make sure you get what you need/want.

J. Angus: jangus@skyld.tele.com -- "Als ik Kan", Gustav Stickley
US Mail: PO Box 4425 Carson, CA 90749-4425 1 (310) 324-6080

Date: Fri, 21 May 1993 19:34:49 GMT
From: elroy.jpl.nasa.gov!sdd.hp.com!col.hp.com!news.dtc.hp.com!srgenprp!
alanb@ames.arpad
Subject: Maxcom fraud (was Re: Don't get ripped off by a G5RV)
To: info-hams@ucsd.edu

Gary Coffman (gary@ke4zv.uucp) wrote:
: In article <C7Csnr.IF9@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
: >Dave Newkirk (dnewkirk@arrl.org) wrote:
: >
: >: So I suspect that resistive
: >: antenna broadbanding is of particular value this special application.
: >
: >But why not just use a high-efficiency antenna and a high-power attenuator?

: >That way, you can exactly control the highest SWR the transmiter will
: >ever see. (e.g. a 6 dB attenuator gives a minimum 12 dB return loss for
: >a maximum SWR of 1.67, even with no antenna connected.)

: Well, on frequencies where the antenna is a good match, the resistor
: will only drop power by 3 db. Your attenuator always drops it by 6 db.

Huh? The loss in the antenna resistor depends on its value and how it is connected. Sounds like you are assuming a 50 ohm resistor in parallel with the feedpoint. With a 50-ohm resistive antenna that would result in a 2:1 SWR. In fact, with any (resistive) antenna impedance less than about 80 ohms, the resistor makes the match WORSE. At least the attenuator always makes the SWR better.

AL N1AL

Date: 21 May 1993 19:51:26 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
usenet.ins.cwru.edu!magnus.acs.ohio-state.edu!ksampath@network.UCSD.EDU
Subject: Question: Can a novice take the extra test?
To: info-hams@ucsd.edu

the subject says it. assuming that the novice has 20 wpm cw, can the ham take the extra test?

curiously,
krishna
kb8fav

--
krishna s. sampath....graduate research associate...kss@lenz.eng.ohio-state.edu
ohio state u, electroscience lab.....(614) 292-7981 (w).....(614) 292-7297 (f)
1320 kinnear rd, columbus, oh 43212..06/93 ee phd looking for emi/emc/comm. job

Date: Fri, 21 May 1993 16:43:53 GMT
From: news.mentor.org.com!mbutts!mbutts@uunet.uu.net
Subject: Ramsey Kit mods
To: info-hams@ucsd.edu

In article <1993May20.211250.28582@mdd.comm.mot.com>, prager@mdd.comm.mot.com
(David Prager) writes:
|> Has anyone sucessfully (or even un-successfully) performed modi-
|> fications to the Ramsey line of receivers. As I understand, they
|> tune a portion of the given band using a varactor. I'm interest-

|> ed in setting up some dedicated freqs to make these radios either
|> single or multiple freq receivers and sacrificing some of their
|> versatility.
|>
|> Ideas?

I found the Ramsey direct conversion NE602-based 40 meter receiver to be very driftly. The tuning diode is a cheap power-supply type, and there is no voltage regulation.

I enjoyed doing several mods to improve this. First I replaced the tuning diode with a real varactor diode, then I replaced the capacitors involved with NPO types, and then I added a zener regulator to the NE602 and tuning network only (not the 386 audio amp). Those mods settled it down nicely. There's enough room on the board to make these mods easy. Finally I got a shaft-driven ten-turn wirewound pot for the tuning. Now there is good bandspread. Then I added an op-amp active audio filter, and I ended up with quite a nice little radio.

Single frequency or any pre-defined frequency will be impossible without doing something about the drift. I'd be strongly inclined to use one or more crystals, diode switched, to accomplish that. If voltage tuning is still desired, then do the above mods and you may find it repeatable enough to drive with several switched trim pots or a DAC.

I had fun fooling with the little rig. The wide-open sound is maybe not so practical but it's such a refreshing relief from crystal-filter distortion. You get the feeling your ear is directly plugged into the ether. I'm looking forward to trying Rick Campbell's well-engineered QST-article rigs.

73 de KC7IT

--
Mike Butts mbutts@qcktrn.com Research Engineering Mgr. 503-685-1302
Quickturn Systems, Inc., 8005 SW Boeckman Road, Wilsonville, Oregon 97070
My opinions are my own, and aren't necessarily shared by Quickturn Systems.

Date: Fri, 21 May 1993 16:47:00 GMT
From: spsgate!mogate!newsgate!zoom.sps.mot.com!user@uunet.uu.net
To: info-hams@ucsd.edu

References <9305181722.AA26942@ucsd.edu>,
<930518.224343.5e4.rusnews.w165w@garlic.sbs.com>,
<1993May20.021418.7391@rsg1.er.usgs.gov>
Subject : Re: Radio Shack 70cm HT?

> |> The problem is, alot of Radio Shacks will sell to anyone. And that's

> |> what caused the demise of 2m in certain areas of the country.
> |>
> |> Tony
> |> -----
> |>
> |> Tony Pelliccio kd1nr/ae "Usenet is like a herd of performing elephants
> |> *!*!*!*!*!*!*!*!*!*!* system@garlic.sbs.com with diarrhea -- massive, difficult to
> |> ----- redirect, awe-inspiring, entertaining, and a
> |> when you least expect it." --spaf (1992)
> |>

This is HORSESHIT. If there has been any demise of 2m (which I doubt), it's been caused by inconsiderate and rude behavior; hardly a result of RS policies. As much as I disdain some of RS practices, they have been a stable source of parts, equipment, and kits (yes, I've built a few of the kits that used to hang next to the leather working tools). They've helped many a small boy pursue his budding interest in electronics.

* Chris Terwilliger, KI7LD/AE
* Motorola
* 2100 E. Elliot Rd. EL374
* Tempe, AZ 85284

rrgd50@email.sps.mot.com *
"And now, the sequence of events, *
in no particular order." *
- Dan Rather *

Date: Fri, 21 May 93 18:09:56 GMT
From: walter!porthos!dancer!whs70@uunet.uu.net
To: info-hams@ucsd.edu

References <1993May20.000048.11197@news.nd.edu>, <930520.233617.8Y1.rusnews.w165w@garlic.sbs.com>, <1993May21.170747.19744@anomaly.sbs.com>
Subject : Re: Radio Shack 70cm HT?

In article <1993May21.170747.19744@anomaly.sbs.com> kd1hz@anomaly.sbs.com (Rev. Michael P. Deignan) writes:

> One reason why RS poses a problem is that all the CBers go there
>to get their latest and greatest 40 channel rig. Then, they walk in,
>see this "neat walkie talkie" on sale, and will go and buy it instead,
>regardless of whether or not they have a license.
>
>The likelihood that this will happen at an HRO or AES store is slim.

Are you saying that HRO or AES will not sell ham gear to an unlicensed

individual OR are you saying HRO or AES don't have potential CB customers who might buy a 2m HT because they see it on the shelf?

Regardless of your answer, I think its time to review some things.

1. As screwed up as CB might be, the situation on the CB channels seems much less of an anarchistic situation today, then it was when CB interest excalated in the late 1970s and early 80s. I have used a CB, typically on channel 19, while traveling and find much less garbage being spewed there today then in the past. Is it a pristine operating environment, certainly not, but it's nothing like it was in the past. Seems to me the interest level in CB just isn't anywhere as high as it was 10/15 years ago.
2. The typical CBer isn't about to fork over \$200+ to buy a 2m HT on a whim. Sure they may see the unit, but most (not all mind you) won't even give it a second thought at the \$200 price tag.

Personally, I hope RS expands their ham radio offerings (anyone from Tandy read this list?) How about a redesign of the 10m transceiver to 6 meters? How about a 70cm HT? How about a real basic 2m mobile with 25 watts?

For those that would limit selling of ham gear to just the HRO, AES and others, I say, "great if you live near one, but this is a big country and I'm glad I can get some of my ham radio needs taken care of at the neighborhood RS."

Bottom line is...if a CBer wants to bootleg on 2m, they'll get the equipment any way they can (guess all those hamfest sales are limited to only licensed hams...:-)

Standard Disclaimer- Any opinions, etc. are mine and NOT my employer's.

Bill Sohl (K2UNK) BELLCORE (Bell Communications Research, Inc.)
Morristown, NJ email via UUCP bcr!cc!whs70
201-829-2879 Weekdays email via Internet whs70@cc.bellcore.com

Date: 21 May 1993 20:34:41 +0100
From: munnari.oz.au!spool.mu.edu!torn!nott!bnrgate!bnr.co.uk!
zaphod.axion.bt.co.uk!uknet!warwick!warwick!not-for-mail@network.UCSD.EDU
To: info-hams@ucsd.edu

References <1993May20.001429.11199@physics.unr.edu>, <C7Cs0t.Hyp@srgenprp.sr.hp.com>, <1993May21.163950.6427@news.yale.edu>
Subject : Re: A Yagi at 11,000 feet

Well here is what the CCIR have to say on the situation, further to my previous posting.

Frequency of 10 MHz assumed.

Sea Water (av. salinity) -	rel. permittivity	= 70
	conductivity	= 5 S/m
	penetration depth	= 0.02m
Fresh Water, 20 deg celsius	r.perm.	= 80
	cond.	= 0.05 S/m
	p.depth	= 4m
Pure Water, ditto	r.p.	= 80
	cond.	= 0.002 S/m
	p.depth	= n/a
Ice (Fresh Water) -1 deg C	r.p.	= 3
	cond.	= 0.0002 S/m
	p.depth	= 30m
ditto -10 deg C	r.p.	= 3
	cond.	= 0.00006
	p.depth	= 150m
Sea Ice -10 deg C	r.p.	= 6.5
	cond.	= 0.002 S/m
	p.depth	= 8m
ditto -35 deg C	r.p.	= 3.5
	cond.	= 0.00018 S/m
	p.depth	= 180m

So, I hope for the sake of the radio work that it's really cold! The report does mention for the sea ice cases, that these are the extreme cases, with the -10 C ice being 'young' ice, and at -35 older than a year.

For comparison with land, the respective values for medium dry ground are 15, 0.035 S/m and 6m, for wet ground 30, 0.15 S/m and 1.5m.

Not sure quite what type of ice it will be up there, but no doubt your friend will be able to work out that for himself, as that's what he's obviously going to be looking at! I'd think a large V on old cold ice would make quite a good antenna for his links back home, assuming that the required angle of radiation is pretty low.

Anyway, that should fuel a few ideas from people..

Cheers,

Simon GOGWA.

End of Info-Hams Digest V93 #622
